

REMARKS

Favorable reconsideration and allowance of the claims of the present application are respectfully requested.

In the present Office Action, Claims 1-14 stand rejected under 35 U.S.C. § 103 as allegedly unpatentable over U.S. Patent No. 5,352,624 to Miwa et al. ("Miwa") in view of U.S. Patent Application Publication No. 2004/0119136, now U.S. Patent No. 6,812,533, to Cai et al. ("Cai").

Insofar as the § 103 rejection is concerned, applicants submit that the statute under 35 U.S.C. § 103(c) states that:

Subject matter developed by another person, which qualifies as prior art only under one or more subsections (e), (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Applicants submit that the secondary reference of Cai was applied by the Examiner as prior art under 35 U.S.C. § 103 via 35 U.S.C. § 102(e). Applicants observe in this regard that MPEP § 706.02(k) states that:

Effective November 29, 1999, subject matter which was prior art under former 35 U.S.C. § 103 via 35 U.S.C. § 102(e) is now disqualified as prior art against the claimed invention if that subject matter and the claimed invention "were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

This change to 35 U.S.C. § 103 is applicable to all utility, design, and plant applications filed on or after November 29, 1999 including continued prosecution

applications (CPA) filed under 37 C.F.R. § 1.53(d). Applicants note that the present application was filed on February 25, 2004; therefore the present application is entitled to the above change in 35 U.S.C. § 103.

In view of this, and the fact the present application and Cai "were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person", Cai is disqualified as a reference under 35 U.S.C. § 103(c).

To evidence that the instant application and Cai "were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person", the assignment document of the present application (recordation date September 21, 2004 at Reel 015155, Frame 0348) was compared with the recorded assignment of Cai (recordation date December 24, 2002 at Reel 013626, Frame 0765). In both instances, the inventors conveyed their entire interest to International Business Machines Corporation; therefore establishing common ownership between the instant application and Cai.

In view of the above information, Cai is disqualified as art therefore the instant § 103 rejection is based solely on Miwa. Applicants submit, in this regard, that Miwa by itself does not render the claimed invention obvious since the applied reference does not teach or suggest a semiconductor structure including an insulating layer over a conductive back gate electrode that is biased to form an inversion charge layer in a base region at an interface between a first semiconductor layer and the insulating layer. Applicants observe that the Examiner has conceded in the present Office Action that Miwa lacks the aforementioned claimed features.

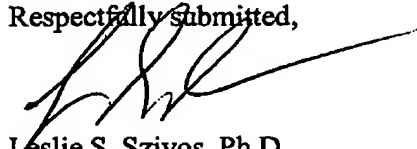
Miwa provides a lateral bipolar transistor including a transistor forming region provided on an insulating substrate; a first impurity diffusing region provided on the insulating substrate on one side of the transistor forming region; an emitter region formed in a first portion of the transistor forming region adjacent to the first impurity diffusing region, the emitter region being formed by diffusing a first conduction type of impurity from the first impurity diffusing region into the first portion of the transistor forming region; a base region formed in a second portion of the transistor forming region adjacent to the emitter region, the base region being formed by diffusing a second conduction type of impurity from the first impurity diffusing region into the second portion of the transistor forming region; and a collector region formed in a third portion of the transistor forming region adjacent to the base region. Accordingly, the base width can be reduced, and the dimensional accuracy of the base width can be improved.

Miwa does not teach or suggest that the disclosed structure includes an insulating layer over a conductive back gate electrode that is biased to form an inversion charge layer in a base region at an interface between a first semiconductor layer and the insulating layer. As such, the claims of the present application are not obvious from the disclosure of Miwa.

The rejection under 35 U.S.C. § 103 has been obviated; therefore reconsideration and withdrawal thereof is respectfully requested.

In view of the foregoing amendments and remarks, it is firmly believed that the present case is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,



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